SOCIETY FOR DEVELOPMENTAL BIOLOGY
PROGRAM FOR THE 1996 ANNUAL SYMPOSIUM
PATTERNING MECHANISMS IN DEVELOPMENT
May 30 - June 4
Vanderbilt University, Nashville, TN

Program Organizer: William Jeffery
Program Committee: David Bader, William Jeffery, David Kimelman and Janet Rossant
Local Organizing Committee: Brigid Hogan, William Jeffery, Billie Swalla, and Christopher Wright

Thursday, May 30

10:00 AM Registration Opens
1:00 PM **Introduction.** William Jeffery, President

1:05 - 4:35 PM Plenary Session I
Evolution of Developmental Mechanisms Billie Swalla, Chairperson
Billie Swalla (Vanderbilt) - Molecular analysis of ascidian development and evolution
Philip Ingham (London) - Signaling by hedgehog family proteins in vertebrate and invertebrate development
Jane Dorweiler (Minnesota) - Teosinte glum architecture: a key locus in maize evolution
Rudolf Raff (Indiana) - Reorganization of developmental mechanisms during evolution

8:00 PM **E. G. Conklin Medal Presentation and Lecture**
Janet Rossant (President-elect, presiding)
9:00 PM Opening Reception at Posters

Friday, May 31

8:30 AM - 12:00 PM Plenary Session II
Signaling and Patterning Mechanisms Brigid Hogan, Chairperson
Lilianna Solnica-Krezel (Vanderbilt) - Genetic analysis of gastrulation in zebrafish
Lee Niswander (Sloan-Kettering) - Growth and patterning in the vertebrate limb
Michael Hoffman (Wisconsin) - Genetic dissection of signaling by *Drosophila* decapentaplegic
Alexandra Joyner (New York) - *En* and *Wnt* genes control patterning in the limbs and CNS

1:30 - 3:10 PM Contributed Paper Session I

3:35 - 6:00 PM Minisymposia (2 parallel sessions)
Fertilization and Egg Activation in Mammals Richard Schultz, Chairperson
Gregory Kopf (Pennsylvania) - Signal transduction pathways regulating mammalian sperm capacitation and the acrosome reaction
Paul Primakoff (Connecticut) - Sperm-egg plasma membrane interactions
Karl Swann (London) - A soluble sperm protein that triggers calcium oscillations in mammalian eggs
Richard Schultz (Pennsylvania) - Activation of the embryonic genome

Transcriptional Control of Development William Klein, Chairperson
William Klein (M. D. Anderson) - Orthodenticle-related genes and differentiation of ectoderm lineages in the sea urchin embryo
Tom Kaufman (Indiana) - Cis and trans-actin elements that define expression domains in the homeotic genes of *Drosophila*
Eric Olson (Texas Southwestern) - Transcriptional control of muscle specific genes
Stuart Orkin (Harvard) - Transcription factors and control of transcription in hematopoiesis

7:30 PM **Educational Issues Workshop** Judith Heady and Richard Nuccitelli, Chairpersons
Introduction: major types of scientific education reform
Robert DeHaan (Emory) - College undergraduate science majors can stimulate education reform
Richard Nuccitelli (UC-Davis) - Improving science education in elementary schools: You can make a difference

8:30 PM **Concurrent Education Sessions**
John Doctor (Duquesne) - Student research projects in a developmental biology teaching lab: Why and how?
Eric Liebl (Denison) - Using *Xenopus* and *Drosophila* in your developmental biology lab - a practical guide
Kathryn Tosney (Michigan) - Using simple origami to help student understand 3-dimensional changes in development
Judith Heady (Michigan) - Teaching developmental biology without lectures using original research articles accompanied by an investigative projects laboratory
9:30 PM Mixer at Posters

Source: https://www.industrydocuments.ucsf.edu/docs/ptbb0000

Saturday, June 1

8:30 AM - 12:00 PM Plenary Session III

Localization and Determinants William Jeffery, Chairperson

Paul Macdonald (Stanford) - Deployment of spatial cues in the *Drosophila* oocyte
Kenneth Kemphues (Cornell) - Understanding mechanisms of cytoplasmic localization in *C. elegans*
Bruce Bowerman (Oregon) - Specification of blastomere identity in the early *C. elegans* embryo
Yuh Nung Jan (UC-San Francisco) - Asymmetric cell division and sister cell fate specification in the nervous system

Women/Minority Interests Luncheon Session Karen Crawford, Chairperson

1:30 - 5:00 PM Plenary Session IV

Patterning in Embryogenesis Christopher Wright, Chairperson

Richard Behringer (M. D. Anderson) - Studies of the vertebrate head organizer
Matthew Scott (Stanford) - The hedgehog/patched pathway in insect and vertebrate development
Robert Vassar (Columbia) - Axonal targeting within the olfactory system
Peter Holland (Reading) - Evolution of developmental patterning systems during vertebrate origins and radiation

8:00 PM Poster Session and Mixer

Sunday, June 2

8:30 AM - 12:00 PM Plenary Session V

Molecular Analysis of Regeneration Susan Bryant, Chairperson

Susan Bryant (UC-Irvine) - Hox genes, growth factors, and nerves in regenerating axolotl limbs
Steven Clark (Michigan) - The regulation of continuous organ formation in plants
Marie-Andress Akimenko (Ottawa) - Genetic control of fin regeneration in zebrafish
Larry Marsh (UC-Irvine) - Genetics of pattern generation and regeneration in *Drosophila* appendages

1:30 - 3:10 PM Contributed Paper Session II

3:35 - 6:00 PM Minisymposia (2 parallel sessions)

Developmental Genetics Elizabeth Raff, Chairperson

Hermann Steller (MIT) - Genetic control of apoptosis in *Drosophila*
Marnie Halpern (Carnegie) - Genetic analysis of patterning in the vertebrate nervous system
Craig Mello (Massachusetts) - Cell fate specification and germ-line determination in early *C. elegans* embryos
Elizabeth Raff (Indiana) - Genetic analysis of microtubule function in *Drosophila*

Morphogenesis Carol Erickson, Chairperson

Carol Erickson (UC-Davis) - Avian neural crest cells migrate into the skin only if they are specified as melanocytes
Robert Ho (Princeton) - Fate map and gene expression in the vertebrate tailbud
Barry Guminer (Sloan Kettering) - The role of C-cadherin in the convergence-extension movements during *Xenopus* gastrulation

8:00 PM **Keynote Lecture**

Walter Gehring (Basel) - The genetic control of eye development and evolution

9:30 PM Mixer at Posters

Monday, June 3

8:30 AM - 12:00 PM Plenary Session VI

Plant Development Judith Croxdale, Chairperson

Kathy Barton (Wisconsin) - Developmental genetics of shoot meristems
Nancy Kirk (UC-Berkeley) - Roots, meristems and the quiescent center
Vivian Irish (Yale) - Using genetic ablation to uncover floral organ specification
Judy Jernstedt (UC-Davis) - Switch hitters: angle meristems that generate roots or shoots

1:30 PM - 6:00 PM Plenary Session VII

Molecular Basis of Organogenesis Paul Krieg, Chairperson

Paul Krieg (Texas) - Homeodomain genes in heart development
Doug Melton (Harvard) - Mesoderm patterning during pancreas development
Ulrike Heberlein (UC-San Francisco) - Mechanisms of *Drosophila* retinal morphogenesis: role of *Hedgehog* and *decapentaplegic* in furrow progression
Jonathan Bard (Edinburgh) - Kidney induction: stimuli and responses

6:15 PM **Society for Developmental Biology Business Meeting**

7:30 PM **Banquet, Awards Ceremony and Departure Party**

Source: https://www.industrydocuments.ucsf.edu/docs/ptbb0000